BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 2: e27162
doi: 10.3897/biss.2.27162

OPEN ACCESS

Conference Abstract

Preparing the Next Generation of Data-Driven Scientists through the Biodiversity Literacy in Undergraduate Education - Data Initiative (BLUE Data)

Anna Monfils[‡], Elizabeth Ellwood[§], Debra Linton[‡], Molly Phillips[|], Lisa White[¶], Natalie Douglas[‡]

‡ Central Michigan University, Mount Pleasant, United States of America
§ Natural History Museum of Los Angeles County, Los Angeles, United States of America
| University of Florida, Gainesville, United States of America
¶ University of California Museum of Paleontology, Berkeley, United States of America

Corresponding author: Anna Monfils (monfi1ak@cmich.edu), Elizabeth Ellwood (ellwoodlibby@gmail.com)

Received: 02 Jun 2018 | Published: 04 Jul 2018

Citation: Monfils A, Ellwood E, Linton D, Phillips M, White L, Douglas N (2018) Preparing the Next Generation of Data-Driven Scientists through the Biodiversity Literacy in Undergraduate Education – Data Initiative (BLUE Data). Biodiversity Information Science and Standards 2: e27162. https://doi.org/10.3897/biss.2.27162

Abstract

The Biodiversity Literacy in Undergraduate Education - Data Initiative (BLUE Data) is a US National Science Foundation-funded Research Coordination Network in Undergraduate Biology (RCN-UBE) working to generate community consensus around biodiversity data literacy skills. This diverse network brings together biodiversity, data, and education specialists to identify core biodiversity data competencies for undergraduate students, develop strategies for integrating these competencies into the introductory biology curriculum, and build capacity for sustained development and implementation of biodiversity and data literacy education. Since the start of funding one year ago, BLUE Data has been working to review the current landscape of data literacy competencies from primary to graduate education in biodiversity data science, identify gaps in student learning related to data and biodiversity science core skills, and generate community consensus on defined biodiversity data literacy standards.

© Monfils A et al. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

At a recent BLUE Data workshop associated with the Emerging Innovations for Biodiversity Data conference in Berkeley, California, participants worked together to define competencies and identify strategies to facilitate broad-scale integration of transferrable data literacy skills and knowledge to improve undergraduate biology training and meet increasing workforce demands in both data and biodiversity sciences. This discussion also identified current efforts and explored existing resources in order to identify gaps that should be targeted in our efforts moving forward.

In this presentation, we will introduce the SPNHC and TDWG communities to BLUE Data, and describe our vision and goals, partners, and educational modules. We will share results from our recent activities, including the outcomes of the Emerging Innovations for Biodiversity Data workshop. BLUE Data welcomes new partnerships with those also interested in defining the undergraduate biodiversity data literacy landscape and charting future efforts of this network.

Keywords

BLUE, biodiversity, literacy, undergraduate, education

Presenting author

Anna Monfils and Elizabeth Ellwood